

High Council for the Evaluation of Research and Higher Education

Department of Research Evaluation

report on research unit:

Cognitive Neuropsychology and Pathophysiology of Schizophrenia NCPS

Under the supervision of the following institutions and research bodies:

Institut National de la Santé Et de la Recherche

Médicale - INSERM

Université de Strasbourg



High Council for the Evaluation of Research and Higher Education

Department of Research Evaluation

In the name of HCERES,1

Michel Cosnard, president

In the name of the experts committee,2

Inez Germeys, chairwoman of the committee

Under the decree $N_{\text{o}}.2014\text{-}1365\,\text{dated}\,\,14$ november 2014,

¹ The president of HCERES "countersigns the evaluation reports set up by the experts committees and signed by their chairman." (Article 8, paragraph 5)

paragraph 5)

² The evaluation reports "are signed by the chairman of the expert committee". (Article 11, paragraph 2)

Evaluation report

This report is the sole result of evaluation by the expert committee, the composition of which is specified below.

The assessments contained herein are the expression of an independent and collegial reviewing by the committee.

Unit name: Cognitive Neuropsychology and Pathophysiology of Schizophrenia

Unit acronym: NCPS

Label requested: UMR_S

Current number: 1114

Name of Director (2016-2017):

Ms Anne GIERSCH

Name of Project Leader (2018-2022):

Ms Anne GIERSCH

Expert committee members

Chair: Ms Inez Germeys, KU Leuven, Belgium

experts: Ms Chloé Farrer, CERCO, Université de Toulouse

Mr Thomas Freret, Université de Caen

Mr Laurent LECARDEUR, Centre hospitalier Universitaire de Caen (representative

of the CNU)

Ms Anne-Lise Pitel, U1077, Université de Caen (representative of the Inserm)

Mr Denis Schwartz, CENIR, Université Paris Sorbonne (representative of

supporting personnel)

Ms Tiziana ZALLA, Institut Jean-Nicod, ENS, Paris

Scientific delegate representing the HCERES:

Ms Céline Souchay

Representatives of supervising institutions and bodies:

Mr Ermanno Candolfi, Hôpitaux universitaires de Strasbourg

Mr Dimitri Sanchez, Hôpitaux universitaires de Strasbourg

Ms Catherine Florentz, Université de Strasbourg

Ms Meriem Marouf-Yorgov, Inserm

Mr Jean Sibilia, Faculté de médecine de Strasbourg

Head of Doctoral School:

Mr Pascal Darbon, Doctoral School n°414, « École Doctorale des Sciences de la vie et de la Santé »

1 • Introduction

History and geographical location of the unit

Created in 1994, the "Cognitive Neuropsychology and Pathophysiology of Schizophrenia" unit is located in two close buildings on the campus of the Faculty of Medicine of Strasbourg. The unit is also perfectly integrated within the Psychiatry Department and ideally placed at the interface between clinics and neurosciences.

In 2013 the unit was integrated into the Strasbourg Federation of Translational Medicine (FMTS) which groups research labs on the campus, and, in 2015, it contributed to create the Hospital-University Federation (FHU) NeurogenYcs which groups together geneticists, neurologists, psychiatrists and neuroscientists to foster knowledge transfer from science to clinical applications. The unit was a member of IFR Neurosciences and is currently a member of the Neuropole, a federation of teams, labs and technical platforms performing fundamental and clinical research in neurosciences.

Management team

The unit is managed by Ms Anne GIERSCH.

HCERES nomenclature

SHS4_2 Psychologie

Scientific domains

The research domain is in Psychology, Psychiatry. The research aims to understand the pathophysiological mechanisms underlying schizophrenia, and, in particular, the neuropsychological mechanisms affecting memory and perception. Two other lines of research consist in studying memory and perception in healthy humans and animal murine models, to develop innovative treatments and remediation techniques. The researchers are specialists from different fields (psychiatry, psychology, pharmacy and biology) who carry out fundamental, clinical and translational research projects.

Unit workforce

Unit workforce	Number on 30/06/2016	Number on 01/01/2018
N1: Permanent professors and similar positions	6	
N2: Permanent researchers from Institutions and similar positions	4	
N3: Other permanent staff (technicians and administrative personnel)	4	
N4: Other researchers (Postdoctoral students, visitors, etc.)	1	
N5: Emeritus		
N6: Other contractual staff (technicians and administrative personnel)	2	
N7: PhD students	13	
TOTAL N1 to N7	30	
Qualified research supervisors (HDR) or similar positions	11	

Unit record	From 01/01/2011 to 30/06/2016
PhD theses defended	10
Postdoctoral scientists having spent at least 12 months in the unit	2
Number of Research Supervisor Qualifications (HDR) obtained during the period	3

2 • Assessment of the unit

Global assessment of the unit

The unit is focusing on the study of the pathophysiology of schizophrenia and the development of new treatments, integrating neurobiological, cognitive and clinical research. They have developed an innovative research line on the experience of time and temporality as well as its relationship to sense of self and autobiographical memory and their relationship to schizophrenia. In addition, they have set-up 5 rehabilitation protocols related to autobiographical memory deficits as well as to metamemory (memory-related awareness). Finally, they have also investigated the cortico-thalamo-cortical system in an animal model of schizophrenia using a ketamine model.

The biggest strength of the unit is that they have a clearly delineated research program with well-integrated research lines, especially for the "human" research lines. The unit has a strong identity and is to be applauded for their evidence-based scientific approach, which is not always evident in psychiatry research. The translational approach combining fundamental research with clinical implications is very powerful and further developed in the 5-year plan. It also makes the unit attractive to students, as was mentioned by several of them. The unit was able to attract students from different fields such as biomedical sciences, psychology and bio-engineering. The unit is very well integrated into the clinic, optimally combining clinical expertise with scientific rigour. They have an active strategy to strengthen this mutual crosstalk, and their projects cover fundamental research to clinical implementation.

Their main focus on new neurocognitive models is highly original and creative, and they have established an international reputation in this field. They have good scientific output and societal impact, translating their research findings to changes in actual clinical practice. The unit is a dynamic and well-structured environment fostering the development of innovative research in the field of schizophrenia. The unit is very well managed by the lab director. Her leadership style unifies the unit, fostering close collaborations between most members while leaving room for individual initiative and growth. This is highly valued by all members of her team.

In terms of weaknesses, there seems to be a lack of integration between the core of the research focusing on human neurocognitive capacities (such as the narrative self) and the animal research line.

Overall, the unit is of very good quality. It combines a mixture of expertise, clearly fostering a translational approach, translating the fundamental work to clinical practice. The unit has interesting and innovative research lines for which they get national and international recognition. The unit is very well managed and they have a growing number of publications, PhD students and funding, so in general, the unit is very good.